



# PhD seminar 2024

## IEP SAS



**Wednesday, June 26, 2024**

**Aula, Watsonova 47, Košice**

**8:30 – 8:45**      **Opening and actual information about PhD study**

**8:45 – 9:00**      **1<sup>st</sup> year:**

**8:45 – 9:00**      **Hanan Kareem Abdul (BP)**  
*Misfolding proteins in amyloid diseases and their prevention/therapy*

**9:00 – 9:30**      **2<sup>nd</sup> year:**

**9:00 – 9:15**      **Viktória Fedorová (BP)**  
*Structural, functional and dynamic features of protein amyloid structures*

**9:15 – 9:30**      **Ravneet Kaur (AM)**  
*Study of the atomic structure of materials with a high degree of disorder*

**9:30 – 10:00**      **Coffee break**

**10:00 – 11:15**      **3<sup>rd</sup> year:**

**10:00 – 10:15**      **Ivana Garčárová (BP)**  
*Evaluation of the importance of hydrophobic interactions in functional and structural integrity of supramolecular protein assemblies*

**10:15 – 10:30**      **Kamil Goliaš (CMP)**  
*Classical to quantum crossover in mechanical resonators*

**10:30 – 10:45**      **Filip Košuth (CMP)**  
*Study of superconductivity in topological materials*

**10:45 – 11:00**      **Dmytro Miakota (PEAM)**  
*Self-organization in nanocomposites based on liquid crystals*

**11:00 – 11:15**      **Kristina Zolochovska (PEAM)**  
*Biomedical and biotechnological applications of magnetic nanoparticles*

**11:15 – 11:30**      **4<sup>th</sup> year:**

**11:15 – 11:30**      **Július Bačkai (PEAM)**  
*Frustrated metallic magnetic systems*

**11:30**      **Short session of supervisors, guarantees and members of Scientific Council IEP SAS**

Explanatory notes:

AM      - Advanced Materials (FS UPJS, guarantee: I. Škorvánek)

BP      - Biophysics (FS UPJS, guarantee: A. Musatov)

CMP    - Condensed Matter Physics (FS UPJS, guarantee: P. Samuely)

PEAM   - Physical Engineering of Advanced Materials (FEI TUKE, guarantee: S. Gabáni)